

INFECTIOUS INSIGHTS

Winter, 2016

NOROVIRUS (CDC)

Mission

Infectious Insights is a newsletter intended to prevent morbidity and mortality of infectious diseases by providing data and recommendations to clinicians, infection control personnel and others who diagnose, treat or care for residents in long term care facilities

We welcome comments and suggestions. Please call if you wish to be added to our mailing list.
Contact
Susan Karras at
815-334-4500 or
slkarras@co.mchenry.il.us

Visit our Long Term Care web page;

<http://www.co.mchenry.il.us/county-government/departments-a-i/health-department/nursing/extended-care>

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Overview:

Norovirus, a highly contagious virus that can be spread by an infected person, contaminated food or water, or by touching contaminated surfaces.

While sick, an infected person sheds billions of tiny viral particles in their stool and vomit. It takes a very small amount, as few as 18 viral particles, to infect another. Norovirus outbreaks occur throughout the year. But, over 80% of the outbreaks occur from November to April.

Although there are multiple acute gastroenteritis illnesses, Norovirus is the focus of this information. It is the most common cause of

acute gastroenteritis in the United States. It is also the most common cause of foodborne-disease outbreaks in the United States. Norovirus illness is not related to the flu (influenza), which is a respiratory illness caused by influenza virus.

The best way to help prevent norovirus is to follow standard precautions.

The virus causes stomach or intestines (or both) to get inflamed (acute gastroenteritis) leading to stomach pain, nausea, diarrhea and vomiting.

The most common symptoms:

- diarrhea
- vomiting
- nausea

- stomach pain

Other symptoms:

- fever
- headache
- body aches

A person usually develops symptoms 12 to 48 hours after being exposed to norovirus.

Most people with norovirus illness get better within 1 to 3 days.

Transmission: Anyone can become infected with norovirus multiple times, attributing to the reason that there are many different types. Being infected with one type of norovirus may not protect you against other types. Norovirus can be found in stool (feces) even before an individual begins feeling sick and can remain in the stool

MCDH Communicable Disease Program

REGULAR OFFICE HOURS

(Monday – Friday 8am – 4:30pm)
(815) 334-4500

Susan Karras, RN, BSN, MBA
CD Coordinator

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CD Investigator/Health Educator

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TB Nurse

Holli Wilke, RN, BSN
STD Nurse

for at least two weeks
after one feels better.

The most contagious period is: when one actually has norovirus illness, and during the first few days after recovery.

Means of transmission:

- Through infected food workers, (often by touching ready-to-eat foods, such as raw fruits and vegetables, with their bare hands before serving them). However, any food served raw or handled after being cooked can get contaminated with norovirus. Norovirus can remain infectious on foods even at freezing temperatures and until heated above 140 degrees Fahrenheit.

- Eating food or drinking liquids that are contaminated with norovirus.
- Touching surfaces or objects that carry the norovirus, (such as clothes, utensils, furniture), and then putting fingers in the mouth; *the virus can remain on these objects for up to two weeks.*
- Having direct contact with a person infected with the virus.
- Aerosolized; (eg. Flushing a toilet with norovirus containing water that may splash upwards)

Click link below for poster
(<http://www.cdc.gov/norovirus/images/how-get-norovirus-lg.jpg>)

Preventing Norovirus Infection

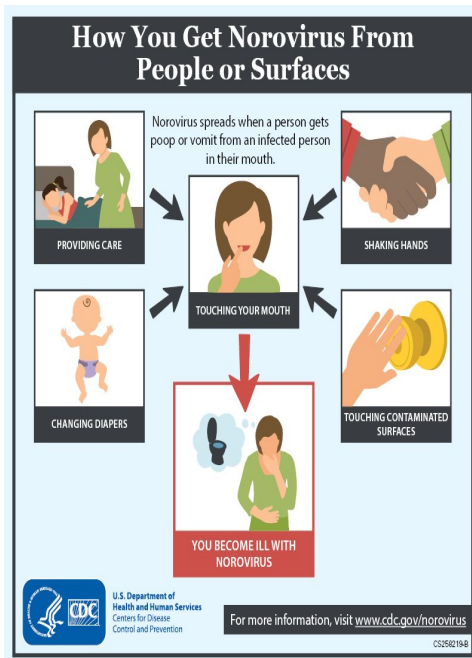
Currently, there is no vaccine to prevent norovirus infection.

Follow Standard Precautions

Alcohol-based hand sanitizers can be used in addition to hand washing. But, they should not be used as a substitute for washing with soap and water.

Click on link below for Poster Handwashing: Clean Hands Save Lives

[View larger image\(http://www.cdc.gov/norovirus/images/stop-norovirus-lg.jpg\)](http://www.cdc.gov/norovirus/images/stop-norovirus-lg.jpg)



**WHAT YOU NEED TO KNOW BEFORE ACUTE
GASTROENTERITIS (A.G.E.) IS IN YOUR FACILITY**

Although Noroviruses are the most common etiological agent, other viruses (e.g., adenoviruses, astroviruses, rotaviruses, sapoviruses) also can cause A.G.E. outbreaks. A.G.E. outbreak prevention can be challenging for LTCFs because these viruses may be introduced via ill staff, visitors, or newly admitted residents. Despite these challenges, A.G.E. outbreaks in LTCFs call for prompt implementation of strict control measures including, but not limited to, isolation of symptomatic residents, exclusion of affected staff, and enhanced cleaning and disinfection.

Be aware of the KEY DEFINITIONS to help you determine if your facility has A.G.E. cases, or an Outbreak is occurring:

Diarrhea: three or more loose stools in a 24-hour period when the occurrence is not readily explained by other known pre-disposing medical factors.

Vomiting: two or more episodes of vomiting in a 24-hour period when the occurrence is not readily explained by other known pre-disposing medical factors.

Acute gastroenteritis (A.G.E.) case: a person (resident or staff) with diarrhea and/or vomiting.

Unit: a functional care unit of the LTCF (e.g., floor, hall, neighborhood, wing).

A.G.E. outbreak: two or more A.G.E. cases occurring in a unit with initial dates of onset within 48 hours of each other. NOTE: When an A.G.E. outbreak occurs in one unit of a LTCF it is common for A.G.E. cases to develop in other units. A.G.E. cases that occur in other units are included in the initial outbreak unless sufficient time has passed to indicate the occurrence of a new outbreak (refer to “Duration of A.G.E. outbreak”).

Duration of A.G.E. outbreak: The time period beginning with the day the index (first) case associated with the outbreak developed A.G.E. symptoms until 96 hours after the last A.G.E. case’s onset of symptoms. (Note: Two incubation periods equal 96 hours.)

For all recommendations on what you need to know, please review the:

Illinois Department of Health’s

“Guideline for the Prevention and Control of Viral Acute Gastroenteritis Outbreaks in Illinois Long-Term Care Facilities, 2012

NOTE: This is the Guideline that McHenry County Department of Health will be using and referring you to.

It includes specific information on procedures and practices to follow:

- Section 1: Acute Gastroenteritis (A.G.E.) Overview
- Section 2: Recommendations for Long-Term Care Facilities
- Section 3: Recommendations for Local Health Departments
- Section 4: Norovirus Information for Illinois Healthcare Professionals
- Section 5: Illinois Norovirus Epidemiology
- Section 6: Line List Examples
- Section 7: Facts About Viral Acute Gastroenteritis
- Section 8: Visitor Signage Example
- Section 9: Worksheet Example

To view, or print off a copy of the Guideline, go to: <https://www.co.mchenry.il.us/county-government/departments-a-i/health-department/nursing/extended-care>.

Additional Resources

Norovirus in Healthcare Facilities Fact Sheet (CDC)

<http://www.cdc.gov/hai/pdfs/norovirus/229110-ANoroCaseFactSheet508.pdf>

Help Prevent the Spread of Norovirus (“Stomach Bug”) (disinfect-for-health)

http://www.disinfect-for-health.org/wp-content/themes/disinfect/pdfs/NorovirusPrevent_8.5x11_English_Color.pdf

Clean-up and Disinfection for Norovirus (“Stomach Bug”) (disinfect-for-health)

http://www.disinfect-for-health.org/wp-content/themes/disinfect/pdfs/NorovirusIncident_8.5x11_English_Color.pdf

ROLES of McHenry County Department of Health’s...

Communicable Disease Program:

The Communicable Disease Program serves to prevent disease and improve the quality of life in McHenry County. It helps to identify communicable disease sources and offer specific recommendations. It also focuses on the person(s) identified with symptoms and confirmed medical proof of Illinois reportable diseases through surveillance and control activities.

Environmental Protection Program

The Environmental Health Programs serve to prevent disease and improve the quality of life in McHenry County. They focus on the health inter-relationships between people and their environment. This is accomplished through public education and the enforcement of applicable environmental public health regulations.

Operational Inspections include:

- Minimal internal cooking temperatures
- Cooling Potential Hazardous Foods
- Employee Hygiene
- Prevention of cross contamination from raw to cooked foods
- Cleaning and sanitizing

The two programs work jointly together in facilities to address outbreaks or related issues.

CALL US!

815-334-4500

And ask to speak to a Communicable Disease Nurse, or

815-334-4585

And ask to speak to an Environmental Health Practitioner.

***Campylobacter* is now reportable in Illinois. MCDH asks that all laboratories and health care providers begin to report *Campylobacter* cases with onsets on or after January 1, 2016.**

Campylobacteriosis, a spiral-shaped bacterium, can cause self-limited illness that typically presents as diarrhea (stools may be bloody), abdominal cramps, malaise, fever, nausea, and vomiting; asymptomatic infections also occur frequently. Most human illness is caused by one species, called *Campylobacter jejuni*, but human illness can also be caused by other species. *Campylobacter* is one of the most common causes of diarrheal illness in the United States. According to the Centers for Disease Control and Prevention (CDC), campylobacteriosis is estimated to affect over 1.3 million persons every year and occurs more frequently in the summer months than in the winter. Rarely, *Campylobacter* can lead to long term consequences such as arthritis and Guillain-Barré syndrome. Although death from *Campylobacter* infections are uncommon, the CDC also estimates that approximately 76 persons with *Campylobacter* infections die each year.

The incubation period is usually 2-5 days but can range from 1-10 days depending on how much of the organism is digested. Ingestion of fewer than 500 *Campylobacter* organisms can cause human illness.

The duration of illness is generally one week or less. If administered early in the course of illness, antibiotics can decrease the duration of symptoms. An infected person can shed *Campylobacter* in their stool for days to weeks even after symptoms have stopped. Person to person transmission is rare but can occur if the infected person is producing large amounts of diarrhea.



**Visit the McHenry County
Department of
Health's
Communicable
Disease
Website and
bookmark our
Extended Care
Facility page
for Guidelines, Disease
Information and Line
Lists.**

**[http://
www.co.mchenry.il.us/
county-government/
departments-a-i/health-
department/nursing/
extended-care](http://www.co.mchenry.il.us/county-government/departments-a-i/health-department/nursing/extended-care)**

**If there is information you
would like to see on our
website please let us
know by calling 815-334-
4500**

The U.S. Food and Drug Administration (FDA) indicates that many healthy chicken and cattle carry the bacteria. Sources of infection with campylobacteriosis can include raw or undercooked chicken, raw milk, and contaminated water. Milk that is unpasteurized can become infected from cow manure that contains *Campylobacter* or from a *Campylobacter* infected cow udder. Surface water and streams can become contaminated from infected cows or birds that defecate in the water.

CDC's Prevention tips for *Campylobacter* infections:

Cook all poultry thoroughly. Make sure that the meat is cooked throughout (no longer pink) and any juices run clear. All poultry should be cooked to reach a minimum internal temperature of 165°F.

Wash hands with soap and water before preparing food and after handling raw foods of animal origin and before touching anything else

Do not drink unpasteurized milk or untreated surface water

Make sure that persons with diarrhea, especially children, wash their hands carefully and frequently with soap to reduce the risk of spreading the infection.

Wash hands with soap and water after contact with animal feces.

MCDH recommends that those in sensitive occupations (e.g. food handlers, health care and day care workers) should remain home from work until 48 hours after the last episode of diarrhea or vomiting. Proper hand washing with soap and water should be stressed with these individuals.

All individuals diagnosed with campylobacter should be reported to the local health department. Public health investigates each case and if a large number of cases are reported, it might indicate that an outbreak has occurred. An outbreak investigation is then initiated to identify the source of infection so action can be implemented to stop the spread of infection to others.